

San Diego Bay Watershed Urban Runoff Management Program Document



A Collaborative Effort of:

City of Chula Vista
City of Coronado
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of San Diego
County of San Diego
Port of San Diego

January 14, 2003

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January 2003

STATEMENT OF CERTIFICATION

San Diego Bay Watershed Urban Runoff Management Program Document

I certify under penalty of law that the San Diego Bay Watershed Urban Runoff Management Program Document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



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Director

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The development and production of this Watershed Urban Runoff Management Program Document for the San Diego Bay Watershed are the result of the talents and experience of numerous individuals. Their contributions and insight made this document a collective success for the environment and for the watershed. The primary authors of the text include:

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ACRONYMS AND ABBREVIATIONS

303(d)	Section of the Clean Waters Act
ANOVA	Analysis of Variance
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMI	Benthic Macroinvertebrate
BMP	Best Management Practices
BOD	Biologic Oxygen Demand
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
COC	Constituent of Concern
COD	Chemical Oxygen Demand
Copermittees	The 18 cities within San Diego County, the County of San Diego, and the Port of San Diego.
Corps	Army Corps of Engineers
CWA	Clean Waters Act
DEH	County of San Diego Department of Environmental Health
GIS	Geographic Information Systems
HU	Hydrologic Unit
IC/ID	Illicit Connection / Illicit Discharge
MLS	Mass Loading Station
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollution Discharge Elimination System
Municipal Permit	San Diego Regional Water Quality Control Board Order 2001-01
NURP	Nationwide Urban runoff Program
RCD	Resource Conservation District of Greater San Diego County
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SDUPD	San Diego Unified Port District (the Port of San Diego)
SUSMP	Standard Urban Stormwater Management Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TDS	Total Dissolved Solids
TIE	Toxicity Identification Evaluation
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
URMP	Urban Runoff Management Program

Executive Summary

San Diego Bay, one of the most spectacular natural bays in the world, is home to a rich variety of native plant and wildlife species and provides critical habitat for migratory birds. Additionally, the Bay is treasured for the aesthetic and recreational benefits it provides.

In recent years, there has been a growing concern that San Diego Bay and its tributaries are being impacted by pollution associated with urban and storm water runoff. Controlling pollution in runoff is critical to preserving aquatic resources and the economic viability of the San Diego region. The *San Diego Bay Watershed Urban Runoff Management Program* is intended to be one in a series of efforts to protect and improve water quality, thereby protecting the natural resources within the watershed and ensure sustainability for future generations.

The *San Diego Bay Watershed Urban Runoff Management Program* document has been prepared by the Port of San Diego, as lead agency, in collaboration with the Cities of Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, San Diego, as well as the County of San Diego – all local agencies which have jurisdiction within the San Diego Bay watershed. The document meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 2001-01, NPDES No. CAS0108758). The Municipal Storm Water Permit requires the development and implementation of Watershed Urban Runoff Management Programs for each of nine watershed areas within San Diego County, including the San Diego Bay watershed. This document represents the plan the jurisdictions and stakeholders have prepared to implement said Program.

The Watershed Urban Runoff Management Program's primary goal is to positively affect the water resources of the San Diego Bay Watershed while balancing economic, social, and environmental constraints. The Program identifies four primary objectives to strive towards this goal: (1) develop and expand methods to assess and improve water quality within the watershed; (2) integrate watershed principles into land use planning; (3) enhance public understanding of sources of water pollution within the watershed; and (4) encourage and enhance stakeholder involvement within the watershed. To help reach these goals and objectives, the *San Diego Bay Watershed Urban Runoff Management Program* document identifies and prioritizes water quality related issues within the watershed that can be potentially attributed to discharges from the municipal storm drain systems. Additionally, activities to abate sources of pollution and restore and protect beneficial uses are also identified. During this initial year, the evaluation of

watershed conditions, or water quality assessment, was based upon a very limited data set. As more data becomes available, it is important that the Program be evaluated and allowed to evolve. Therefore, constituents that have been identified as “high priority” water quality issues in this year’s assessment may be removed from the high priority list in future years. The reverse holds true for issues that were not identified as high priority water quality issues in this year’s assessment.

The data from this year’s water quality assessment suggests that copper, zinc, diazinon, bacteria, and turbidity/total suspended solids (TSS) are potential major water quality concerns. Other potential constituents or conditions of concern identified in the assessment that may present high priority water quality issues in the future include: lead, total Kjeldahl nitrogen, and trash. The water quality assessment is discussed in detail in Section 3.

To address the high priority and potential high priority issues identified in this year’s assessment, this Program recommends a series of activities in Section 5, in addition to the existing and planned activities identified in Section 6 (Land Use Planning), Section 7 (Watershed-Based Education), and Section 8 (Public Participation.) Specifically, the San Diego Bay Watershed Copermittees and stakeholders will address the high priority water quality issues through: (1) implementation of the Total Maximum Daily Load (TMDL) for diazinon in the Chollas Creek sub-watershed; (2) implementation of a regional integrated pest management campaign to address diazinon and other pesticides; (3) development of a bacteria source investigation project; (4) collection and analysis of additional years of water quality data; (5) implementation of the Standard Urban Storm Water Mitigation Plan’s development requirements to address sedimentation and siltation; and (6) implementation of source water protection guidelines as they become available. These activities are expected to evolve as new information becomes available regarding the watershed’s water quality conditions and the activities’ effectiveness, and as funding allows.

The *San Diego Bay Watershed Urban Runoff Management Program* has been developed with the input from a diverse set of stakeholders, who will also be an integral part of program implementation. It is the goal of all participating jurisdictions to work cooperatively with other agencies, non-governmental organizations, and private citizens at the watershed level in order to positively affect the water resources of the region and achieve compliance with the Municipal Permit. It should be noted that this program has been written with the public in mind as a means to engage San Diego Bay watershed area residents in watershed issues and to facilitate public understanding of challenges related to the protection of our precious water resources.

Participating agencies consider this point in time to be the beginning of a continuous long-term process, which will be further developed and refined over time. Consistent

with the Municipal Permit, Program amendments and/or revisions will be submitted to the California Regional Water Quality Control Board – San Diego Region for review as part of the annual reporting process. The Cities of Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, San Diego, the County of San Diego, and the Port of San Diego, share the implementation responsibilities for the Program along with other stakeholders. Due to the commitments of these agencies, this watershed program is expected to extend beyond the Municipal Permit expiration date of February 21, 2006.

The *San Diego Bay Watershed Urban Runoff Management Program* signifies the beginning of a long-term effort to protect and enhance the water quality of the bay and its tributaries at the watershed level. This Program also hopes to provide a mechanism for coordination of existing water quality related efforts in the watershed. The Program was developed with stakeholder participation and will integrate, where pertinent, with other projects such as Watershed Management Plans. In addition to developing our understanding of the ecosystem, there is a desire to locate storm water Best Management Practices within creek sections, where appropriate, downstream of existing urbanized areas because of the long-term water quality benefits.

Using the watershed approach, the Cities Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, San Diego, as well as the County of San Diego, and the Port of San Diego aim to protect and enhance aquatic resources in a cost effective, environmentally sensitive, and collaborative manner.

Report Organization

This report is organized in three major parts:

Part I, "Introduction and Watershed Description," provides general information about the San Diego Bay watershed and the regulatory context within which this program was developed;

Part II, "Water Quality Assessment," provides an assessment of the quality of the water of receiving bodies within the watershed and identifies and prioritizes related challenges; and,

Part III, "Plan of Action," outlines the activities the local jurisdictions will undertake in cooperation with others in order to address the water quality problems that have been identified.